ABSTRACT: Owing to advances in medicine, with the increase

Key words: Wavelet transform, Medical image, Image fusion
Modeling and Design of Controllers for Switched Reluctance Motor Based on Asymmetrical Γ-Source Inverters

Original Research, C15
Mehdizadehmoghadam SM and Hajizadeh M.

ABSTRACT:
In this paper a power electronic converter on the basis of asymmetrical Γ-Source inverter has identified to control the Switched Reluctance Motor (SRM). The performance of proposed control system has been tested in MATLAB/simulink to prove the performance of the designed control system.

Keywords:
Power Electronic Converter, Asymmetrical Γ-Source Inverter.
ABSTRACT

Path-finding in Multi-Agent, unexplored And Dynamic Military Environment Using Genetic Algorithm

Keywords

Multi-agent system, Pathfinding, Chromosome, Fitness Function
ABSTRACT: Optimal placement of dispersed generation in electrical distribution systems was carried out considering the voltage and losses reduction. The PSO algorithm was applied to find the optimal positions and a position with no dispersed generation. The results indicated the competency of the proposed algorithm.

Keywords: Optimal Placement, Dispersed Generation, PSO Algorithm, Voltage Profile, Losses.

A Compact Monopole Antenna for Wireless Applications

ABSTRACT: A tiny wideband microstrip-fed monopole antenna which includes of a radiating patch with two L-shaped notches and stubs was designed for wireless applications. Ansoft HFSS and details of the proposed antenna design approach and measured results are also presented and discussed.

Keywords: Microstrip Antenna, Monopole, Wireless.
Modeling and Optimizing the Hardness of the Melted Zone in Submerged Arc Welding Process using Taguchi Method

Original Research, C19
Aghakhani M and Shahverdi Shahraki H.

ABSTRACT: Welding, as one of the most useful method for permanent joint of components, is of great importance in industry. Among the factors effecting on the hardness of the melted zone, factors of welding current and speed, welding gas flow rate, welding layer space between welding pieces, welding polarity, welding speed, and thickness of magnesium oxide nanoparticles had respectively the highest impact on the hardness of melted zone.

Keywords: Submerged Arc Welding, Hardness of Melted Zone, Taguchi Method, Analysis of Variance, Optimization.


**Discretization of Cuckoo Optimization Algorithm for Solving Quadratic Assignment Problems**

Original Research, C20
Kazemi E and Dejam S.

**ABSTRACT:** Quadratic Assignment Problem (QAP) is one of the combinatorial optimization problems for which research has been done in many fields. This problem is an attempt to set up a matrix of cost, which is a cost matrix, on the points, and the edges of the problem that are connected to the distance between points, and the edges of the problem that are connected to the distance between points. This paper represents the way of discretizing the Cuckoo optimization algorithm for solving the quadratic assignment problem.

**Keywords:** Quadratic Assignment Problem (QAP), Meta-Heuristic Algorithms, Discrete Cuckoo Optimization Algorithm (DCOA).